Oct. 8, 1935. G. A. BERGSTROM 2,016,827

JEWELRY CATCH

Filed Nov. 15, 1934

Fig. 1.

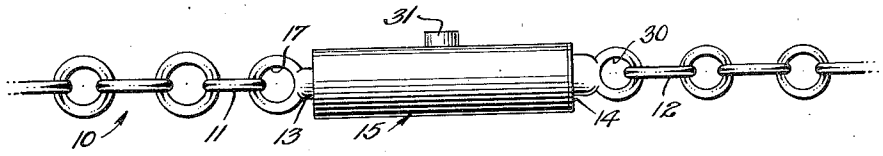


Fig. 2.

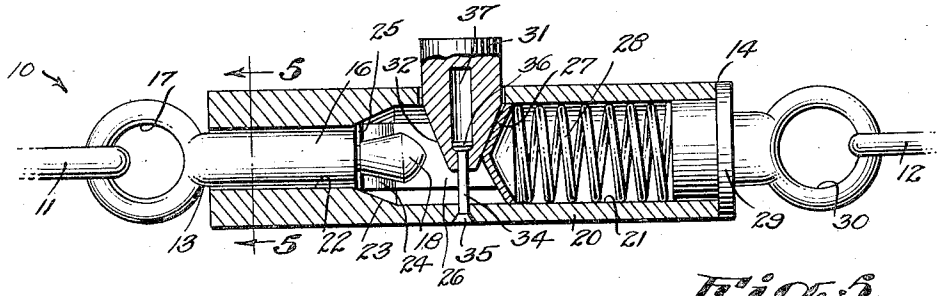


Fig. 5.

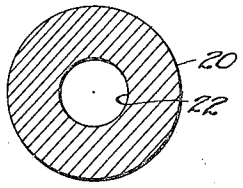


Fig. 3.

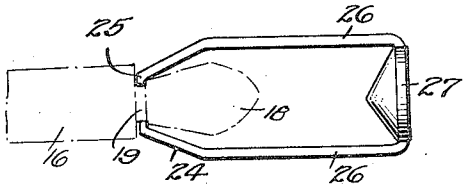


Fig. 6.

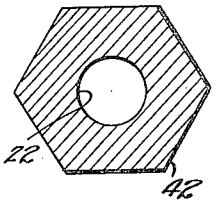


Fig. 7.

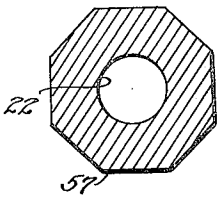
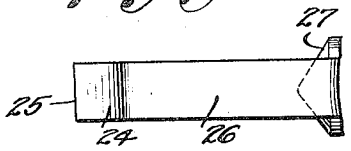


Fig. 4.



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JEWELRY CATCH

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Application November 15, 1934, Serial No. 753,232

4 Claims. (Cl. 24—230)

This invention relates to a jewelry catch especially intended for necklaces, bracelets, and similar articles of jewelry, and has for an object to provide an improved catch for joining the ends of such a piece of jewelry together.

A further object of this invention is to provide an improved jewelry catch consisting of a male and female member, wherein the male member may be inserted into the female member in any turned position and may be released therefrom by pressing an easily accessible button on the side of the female member. With this jewelry catch the male member will be caught and held securely by the female member whenever it is inserted therein without the necessity of placing the male member at any circular angle relative to the female member. Thus, when a woman is placing a small necklace, such as a choker on her neck and is fastening it at the back, it is not necessary to rotate the male member relative to the female member in order to secure the same, but instead the male member need be only inserted into the female member to securely hold the ends of the necklace or choker together.

With the foregoing and other objects in view, as will hereinafter become apparent, this invention comprises the constructions, combinations and arrangements of parts, hereinafter set forth, disclosed and shown on the accompanying drawing. In this drawing,

Figure 1 is a side elevation of the invention,

Figure 2 is an enlarged vertical section of the same,

Figure 3 is a top plan view of the spring catch,

Figure 4 is a side elevation of the same,

Figure 5 is a sectional view of the casing taken on the line 5—5 of Figure 2, and

Figures 6 and 7 are views similar to Figure 5 showing hexagonal and octagonal surfaces on the casing.

There is shown at 10 a representation of a necklace, bracelet, or choker whose end links 11 and 12 are secured effectively to the male member 13 and female member 14 of the jewelry catch 15 constituting this invention.

The male member 13 consists of a plunger 16 having at one end an eyelet 17 for securing the same to the link 11 and having at its other end a substantially wedge shaped head 18 which is spear shaped in cross section and is joined to the plunger 16 by a reduced neck 19. The female member 14 consists of a hollow shell 20 having two cylindrical openings 21 and 22 extending therein from opposite ends and joined together by a conical or tapering section 23.

The cylindrical opening 22 is of a diameter to receive the plunger 16 therein. The plunger 16 is held within the cylindrical opening 22 by means of a pair of spring fingers 24 having locking ends 25 cooperating with the reduced shoulder or neck 19 behind the spear head 18 of the plunger 16. The spring fingers 24 are formed on the end of prong 26 joined together on a base 27, the base 27 being cone shaped in cross section as shown in Figure 2. A coil spring 28 occupying the larger diametered cylindrical opening 21 in shell 20 is held therein by a riveted member 29 closing the end of the opening 21, an eyelet 30 formed on the riveted member 29 serving to receive the end link 12 of the necklace or choker 10.

The other end of the compression spring 28 presses the base 27 so as to cause the fingers 24 to press against the conical section 23 of the opening and press the locking ends 25 into cooperation with the shoulder 19 behind the spear head 18 and hold the male member 13 in locked position therein.

In order to release the male member 13 from the female member 14 from locked position whenever desired, a button 31 inserted through the sides of the shell 20 is provided with a tapered end 32 and held in position between the spring prongs 26 by a pin 34 wedged through the opposite side of the shell 21 as at 35. The other end of this pin 34 is upset as at 36 within an enlarged cylindrical opening 37 in the button 31. The tapered end 32 contacts with the conical base 27 and when the button 31 is depressed this tapered edge 32 presses the base 27 compressing the spring 28 and causing the prongs 26 to withdraw the fingers 24 from contact against tapered shoulder 23. The fingers 24 then expand of their own resiliency and withdraw the locking ends 25 from the reduced neck 19 behind the spear head 18 allowing the plunger 16 to be withdrawn from the opening 22, thus separating the male member and female member and unlocking the ends 11 and 12 of the choker 10.

To relock the catch 15 it is only necessary to insert the plunger 16 into the shell 20 whereupon the forward end of the spear head 18 will press against the locking ends 25 of the fingers 24, compressing the coil spring 28 until the locking ends 25 gradually separate as they are pressed away from the conical section 23 and then finally pass over the maximum diameter of the spear head 18 and are then forced by the pressure of the coil spring 28 onto the reduced neck 19 to

hold the male and female members securely together.

As will be obvious, the female member 14 may be rotated about its cylindrical axis indefinitely without interfering with the operation of either locking or unlocking the catch. Although the female shell 29 has been shown as being circular in outside cross section, it is obvious that the outside cross section may be any other desired shape such as hexagonal as shown at 42 in Figure 6 or octagonal as shown at 57 in Figure 7.

The novel features and the operation of this device will be apparent from the foregoing description. While the device has been shown and the structure described in detail, it is obvious that this is not to be considered limited to the exact form disclosed and that changes may be made therein within the scope of what is claimed without departing from the spirit of the invention.

Having thus set forth and disclosed the nature of this invention, what is claimed is:

1. A jewelry catch comprising a male member and a female member, means for locking said male member within said female member irrespective of the rotation of said male member about its longitudinal axis, said female member comprising a cylindrical shell, said shell having differently diametered cylindrical openings extending therein from opposite ends, said openings being joined together by a conical section, a compression spring within said larger diametered cylindrical opening, a riveted eyelet closing said larger diametered opening and providing a base for said compression spring, a bifurcated member comprising a conical base, a pair of parallel prong members, each prong member terminating in an inturned spring finger and an inturned locking end, said conical base resting against said compression spring and said inturned spring fingers causing said locking ends to press against said conical section of said shell and converge toward each other to lock said male member therebetween.

2. A jewelry catch comprising a male member and a female member, means for locking said male member within said female member irrespective of the rotation of said male member about its longitudinal axis, said female member comprising a cylindrical shell, said shell having differently diametered cylindrical openings extending therein from opposite ends, said openings being joined together by a conical section, a compression spring within said larger diametered cylindrical opening, a riveted eyelet closing said larger diametered opening and providing a base for said compression spring, a bifurcated member comprising a conical base, a pair of parallel prong members, each prong member terminating in an inturned spring finger and an inturned locking end, said conical base resting against said compression spring and said inturned spring fingers causing said locking ends to press against said conical section of said shell and converge toward each other to lock said male member therebetween, and a lock releasing button extending through the sides of said shell between the spring prongs of said bifurcated member, a tapered end on said button, said tapered end contacting with said conical base of said bifurcated member, and pin means for guiding and holding said button in operative position.

3. A jewelry catch comprising a male member and a female member, and means for locking said male member within said female member irrespective of the rotation of said male member about its longitudinal axis, said means comprising a reduced spear head formed on one end of said male member, said female member comprising a cylindrical shell, said shell having differently diametered cylindrical openings extending therein from opposite ends, said openings being joined together by a tapered conical section, a compression spring within said larger diametered cylindrical opening, a base for said spring closing said larger diametered opening, and a locking member within said larger diametered opening between said compression spring and said tapered conical section, said locking member including a pair of parallel prong members, each prong member terminating in an inturned spring finger, and an inturned locking end, said inturned spring fingers and locking ends of said bifurcated member being pressed against said conical tapered section by said compression spring whereby said locking ends converge toward each other to grip said reduced spear head of said male member therebetween.

4. A jewelry catch comprising a male member and a female member, and means for locking said male member within said female member irrespective of the rotation of said male member about its longitudinal axis, said means comprising a reduced spear head formed on one end of said male member, said female member comprising a cylindrical shell, said shell having differently diametered cylindrical openings extending therein from opposite ends, said openings being joined together by a tapered conical section, a compression spring within said larger diametered cylindrical opening, a base for said spring closing said larger diametered opening, and a locking member within said larger diametered opening between said compression spring and said tapered conical section, said locking member including a pair of parallel prong members, each prong member terminating in an inturned spring finger, and an inturned locking end, said inturned spring fingers and locking ends of said bifurcated member being pressed against said conical tapered section by said compression spring whereby said locking ends converge toward each other to grip said reduced spear head of said male member therebetween, said bifurcated member including a conical base extending toward said locking ends and away from said compression spring, and a lock releasing button extending through the sides of said shell between the spring prongs of said bifurcated member, said button having a tapered end thereon contacting with said conical base of said bifurcated member to thereby compress said compression spring and withdraw said locking ends from contact against said conical sections allowing them to withdraw from locking engagement with said spear head of said male member when said lock releasing button is depressed.

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